

## ABSTRACT

The present invention relates to an air-conditioning system for rooms comprising a cooling module (2) associated to a heating system (8), a plurality of fan-convector (F<sub>1</sub>, ..., F<sub>n</sub>) acting as both as heating and cooling terminals, a single hydraulic circuit (5, 7) leading a fluid to said plurality of fan-convector (F<sub>1</sub>, ..., F<sub>n</sub>), said cooling module (2) being equipped with a first inlet tube (B) and a first outlet tube (A), said heating system (8) being equipped with a second inlet tube (D) and a second outlet tube (F), said single hydraulic circuit (5, 7) comprising an intake tube (5) and a return tube (7). The peculiar characteristics is that said cooling module (2) comprises a three-way switching valve (V1) whose central outlet is connected to said intake tube (5) of said single hydraulic circuit (5, 7), an inlet is connected to said second outlet tube (F) of said heating system (8), and an inlet is connected to said first outlet tube (A) of said cooling module (2), said return tube (7) of said hydraulic circuit (5, 7) being connected to said second inlet tube (D) and to said first inlet tube (B), so that said three-way switching valve (V1) connects said plurality of fan-convector (F<sub>1</sub>, ..., F<sub>n</sub>) both during cooling and dur-

ing heating operating mode.

(Figure 1)